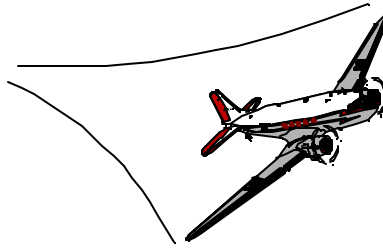


# **SPECIAL AIRWORTHINESS INFORMATION BULLETIN**

Aircraft Certification Service  
Washington, DC



U.S. Department  
of Transportation

**Federal Aviation  
Administration**

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*We post SAIBs on the internet at "av-info.faa.gov"*

*This is information only. Recommendations are not mandatory.*

## **Introduction**

This Special Airworthiness Information Bulletin (SAIB) provides you, an owner or operator of Raytheon Aircraft Company Beech Model 76 Duchess airplanes, of safety information regarding inspection and maintenance of the main landing gear (MLG).

## **Background**

The FAA has received service difficulty reports of broken clevis pins, missing connecting pins and/or severely worn bushings at the lower attachment point of the MLG shock absorber. Severe wear in the self-lubricated bushings in the shock absorber can create excess friction between the connecting pin and the bushings, which may cause the pin to turn and break the clevis pin that retains it. In one instance, a broken clevis pin allowed the connecting pin to work loose and fall out. This caused the fork portion of the MLG to fold up, which jammed the tire, resulting in the aircraft pulling off the runway where it sustained wing and propeller damage.

The Model 76 Maintenance Manual, Section 5-20-00 H., states: "Inspect the shock strut and components for condition, attachment, proper inflation and leakage" at the 100-hour inspection. The items of concern are shown in Figure 2 of Section 32-10-00 of the Maintenance Manual.

## **Recommendation**

We recommend that, during the 100-hour inspection referred to above, you give close attention to the MLG shock absorber lower attachment point. In particular, we recommend that the mechanic:

1. Inspect the self-lubricated bushings installed in the lower lugs of the shock absorber for conditions of excessive wear.
2. Inspect the shock absorber connecting pin (Item 5 of Figure 2, referenced above) for proper position, centered within the shock absorber lugs.
3. Inspect the lower portion of the clevis pin that retains the connecting pin in position for proper installation and signs of binding. If the clevis pin is free to rotate, this is an indication that the pin is not binding.
4. If any of the above inspections reveal abnormalities, the FAA strongly recommends removal of the shock absorber and close inspection of the connecting pin, clevis pin and bushings, and replacement of these items as necessary.

## **For Further Information Contact**

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Raytheon TMDC at (800) 796-2665 or (316) 676-8238 for copies of Model 76 Maintenance Manual, Section 5-20-00 H.